

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>EL/2-22733</b>	<b>FOR FURTHER ACTION</b> <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. <b>PCT/EP 03/08654</b>	International filing date (day/month/year) <b>05/08/2003</b>	(Earliest) Priority Date (day/month/year) <b>14/08/2002</b>
Applicant  <b>CIBA SPECIALTY CHEMICALS HOLDING INC.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 07 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

### 1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☒ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/0064

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D487/22 C09B47/04 G02B5/20 G02F1/13 C09B67/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D C09B G02B G02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 896 327 A (RICOH KK) 10 February 1999 (1999-02-10) claims	1-10
A	WO 95 26381 A (TREACHER KEVIN EDWARD ;SECR DEFENCE (GB); CLARKSON GUY JAMES (GB);) 5 October 1995 (1995-10-05) examples	1-10
A	EP 0 519 423 A (MITSUI TOATSU CHEMICALS ;YAMAMOTO CHEMICALS INC (JP)) 23 December 1992 (1992-12-23) cited in the application claims; examples	1-10
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&amp;\* document member of the same patent family

Date of the actual completion of the international search

9 February 2004

Date of mailing of the international search report

24.02.2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Fazzi, R

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/00004

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	RAGER, CHRISTINE ET AL: "Influence of substituents, reaction conditions and central metals on the isomer distributions of 1(4)-tetrasubstituted phthalocyanines" CHEMISTRY--A EUROPEAN JOURNAL (1999), 5(1), 280-288, XP001155922 page 281	9
X	RUF, MICHAEL ET AL: "Silicon and Zinc Coordination to Peripheral Catechol Sites of (2,3,9,10,16,17,23,24-Octahydroxyphthalocyaninato)nickel(II). Phthalocyanine Coordination Chemistry at the Edge" INORGANIC CHEMISTRY (1998), 37(8), 1992-1999, XP002259123 page 1993	9
X	HU, MOUGANG ET AL: "Hydroxyphthalocyanines as potential photodynamic agents for cancer therap" JOURNAL OF MEDICINAL CHEMISTRY (1998), 41(11), 1789-1802, XP002174054 page 1792 -page 1794	9
X	GUO L ET AL: "Ligand Substitution Effect On Optical Properties In Conducting Tetraazaporphyrines" MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS, MATERIALS RESEARCH SOCIETY, PITTSBURG, PA, US, vol. 393, 1995, pages 137-142, XP002089359 ISSN: 0272-9172 page 139	9
A	BOYLE R W ET AL: "BIOLOGICAL ACTIVITIES OF PHTHALOCYANINES - XVI. TETRAHYDROXY- AND TETRAALKYLHYDROXY ZINC PHTALOCYANINES. EFFECT OF ALKYL CHAIN LENGTHON IN VITRO AND IN VIVO PHOTODYNAMIC ACTIVITIES" BRITISH JOURNAL OF CANCER, LONDON, GB, vol. 67, no. 6, 1993, pages 1177-1181, XP001008599 ISSN: 0007-0920 page 1178	9

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## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/0004

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	TSUDA K: "COLOUR FILTERS FOR LCDS" DISPLAYS, ELSEVIER SCIENCE PUBLISHERS BV., BARKING, GB, vol. 14, no. 2, 1993, pages 115-124, XP000397434 ISSN: 0141-9382 cited in the application the whole document ----	1-10
A	SOMASHEKARAPPA ET AL.: "Synthesis and structural studies on 1,8,15,22-tetrahydroxy phthalocyanines of Co(II), Ni(II), Cu(II), and Zn(II)" ORIENTAL JOURNAL OF CHEMISTRY, vol. 15, no. 1, 1999, pages 65-70, XP009019603 cited in the application the whole document ----	1-10
Y	WO 02 04563 A (CIBA SC HOLDING AG) 17 January 2002 (2002-01-17) claims 12-14 ----	11
Y	EP 1 168 048 A (SUMITOMO CHEMICAL CO.) 2 January 2002 (2002-01-02) page 1 -page 2; claims 1-3 ----	11
Y	EP 0 965 874 A (CANON KK) 22 December 1999 (1999-12-22) claims; examples ----	11
Y	EP 0 531 106 A (IBM ;FUJI PHOTO FILM CO LTD (JP)) 10 March 1993 (1993-03-10) page 2 -page 4; claim 3; examples ----	11
Y	PATENT ABSTRACTS OF JAPAN & JP 2001 124921 A (TOPPAN PRINTING CO LTD), 11 May 2001 (2001-05-11) abstract -----	11

# INTERNATIONAL SEARCH REPORT

International Application No.  
PCT/EU/86/08654

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

**1. Claims: 1-10**

Claim 1 relates to a colour filter comprising a compound of formula (I). Claims 2-4 are dependent on claim 1 and claims 5-10 disclose a liquid crystal display, a composition for making colour filters, a mass-coloured high molecular mass organic material comprising a compound of formula (I) and compounds of formula (I) themselves.

**2. Claim : 11**

Claim 11 describes a liquid crystal display comprising a colour filter, a phthalocyanine compound and a luminescent backlight source emitting green light.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/000004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0896327	A	10-02-1999	JP 3309307 B2 JP 11048613 A EP 0896327 A1 US 6045971 A	29-07-2002 23-02-1999 10-02-1999 04-04-2000
WO 9526381	A	05-10-1995	DE 69509379 D1 DE 69509379 T2 EP 0751977 A1 WO 9526381 A1 GB 2302095 A , B JP 9511001 T US 5792860 A	02-06-1999 26-08-1999 08-01-1997 05-10-1995 08-01-1997 04-11-1997 11-08-1998
EP 0519423	A	23-12-1992	JP 3016649 B2 JP 5171052 A CA 2071474 A1 DE 69228502 D1 DE 69228502 T2 EP 0519423 A2 JP 5295283 A US 5695911 A US 5380842 A	06-03-2000 09-07-1993 20-12-1992 08-04-1999 12-08-1999 23-12-1992 09-11-1993 09-12-1997 10-01-1995
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EP 0531106	A	10-03-1993	JP 3147423 B2 JP 5119213 A DE 69215303 D1 DE 69215303 T2 EP 0531106 A1 US 5374493 A	19-03-2001 18-05-1993 02-01-1997 30-04-1997 10-03-1993 20-12-1994
JP 2001124921	A	11-05-2001	NONE	